

PATRYK PAWEL RADYJOWSKI

🏠 1906 Pearl Street Apt 201, 78705 Austin, TX ☎ (512) 541-8332 ✉ patryk.radyjowski@gmail.com
🌐 <http://www.linkedin.com/in/patrykradyjowski> 📄 <https://github.com/pradyjowski>

EDUCATION

The University of Texas at Austin, Austin, TX Expected May 2021
Ph.D. Graduate program in Mechanical Engineering GPA 3.83/4.00
Dissertation: "Additive Manufacturing of cermet based combustion devices"

The University of Edinburgh, Edinburgh, UK May 2013
1st class Master & Bachelor of Engineering with Honours, Electrical and Mechanical Engineering
Thesis: "Cooling System Design for a Superconductive Coil"

EXPERIENCE

Graduate Research The University of Texas at Austin 01/2015 - current

- Use of Laser Sintering AM method with ceramic powders and liquid metal infiltration
- Operations and safety oversight over the experimental combustion laboratory
- Familiarity with laser sintering equipment and high temperature vacuum furnaces
- Mentoring of undergraduate researchers, 7 years of teaching assistance in thermodynamics

Summer Intern Mitsubishi Electric Research Laboratories 05/2017 - 08/2020

- Developed a prototype of space-rated 3D resin printer aimed at CubeSats

Lead Technical Designer Texas Guadalupe - Hyperloop 9/2015 - 7/2019
MIT Hyperloop II 8/2018 - 7/2019

- Senior designer for SpaceX Hyperloop Competition student pod entry
- Full CAD design, CFD aerodynamic, vacuum validation and FEM structure analysis
- Pneumatic lead – delivered 6000 psi N₂ distribution system approved by SpaceX

Undergraduate Research Assistant The University of Edinburgh 9/2011 - 12/2011

- Created an algorithm for processing IR images that is still being used at the University College Dublin and Imperial College London

SKILLS

- Technical interests: Thermal design, Combustion and Additive Manufacturing
- Proficient in C++, LabView, LaTeX, MATLAB, and Python programming languages
- Familiar with Linux, CFD (OpenFOAM, Fluent), and CAD (Fusion 360, SolidWorks)
- Maker – DIY built a 3D printer and a CNC router, machine shop experience
- Practical experience in electronics (Arduino) and PC hardware
- Passionate about rocketry, space exploration and IT technology

SELECTED PUBLICATIONS

- P. Radyjowski, I. Schoegl & J. Ellzey (2020) Experimental and Analytical Investigation of a Counterflow Reactor at Lean Conditions, Combustion Science and Technology (under review)
- A. Weiss, W.S. Yerazunis, P. Radyjowski & R. Cottrell (2019) On-Orbit Additive Manufacturing of Parabolic Reflector via Solar Photopolymerization, International Astronautical Congress, October 2019, IAC19C2.IP.2.x51358
- P. Radyjowski, O. Keysan, J. Burchell & M.A. Mueller (2016) Development of a superconducting claw-pole linear test-rig, Superconductor Science and Technology Vol. 29, Iss. 4, 2016 DOI: 10.1088/0953-2048/29/4/044002

ACCOMPLISHMENTS

Innovation Award, SpaceX Hyperloop Competition IV (MIT Hyperloop II), July 2019
Innovation Award, SpaceX Hyperloop Competition II (Texas Guadalupe), August 2017

WORK ELIGIBILITY

International student – F1 visa non-resident alien – viable for extended OPT program.